

REMARKS

This communication is in response to the Office Action mailed on November 3, 2003. In the Office Action claims 1-40 were pending of which claims 1-40 were rejected.

Before addressing the specific objections and rejections in the Office Action, it is noted that the specification at pages 14 and 15 have been amended to correct the notation used in Equation 1 and an errant line number "20" of page 15 being superimposed on Equation 2. Approval of these changes is respectfully requested.

The Office Action first reports that the drawings were objected to because reference 144 in FIG. 4 was described differently in the written description when compared with the drawings. It is noted that the description in block 144 comports with the description provided at page 16, lines 6-10. At page 16, lines 22-23, it is stated that step 144 can include building a corpus, which is an example of how step 144 can be performed. Block 144 has been amended to reflect page 16, lines 22-23. Accordingly, withdrawal of the objection is requested.

The Office Action next reports that claims 1-2, 5-6, 10-11, 15-22, 25-26, and 28-30 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,629,071.

Claim 1 has been amended and recites a method for creating a language model for a speech recognition system to disambiguate characters of an Asian language, the method comprising, for each word phrase of a list of word phrases comprising Asian characters, associating a character string of the word phrase and the word phrase with a context cue indicative of disambiguating the character, and building a language model as a function of the associated word phrases and character strings. [emphasis added]

Claim 1 as amended relates to disambiguating characters of an Asian language. It is believed that Mann does not teach, show, or suggest whether or how it can be applied to Asian languages. Mann discloses a large vocabulary speech recognition system with the ability to recognize alphanumeric sequences. [abstract] Mann further provides that such a method finds particular applicability for alphanumerics, such as car registration numbers, catalogue references, etc. [Col. 3, lines 1-3] Therefore, it is believed that claim 1 is patentable over the cited art at least because it is directed towards Asian languages. Claims 2-11 and 13-17 depend on claim 1 and are believed to be separately patentable. Claim 12 has been cancelled. Reconsideration and allowances of claims 1-11 and 13-17 are respectfully requested.

Claim 18 has been amended and recites a computer readable medium having instructions, which when executed by a processor perform a method for recognizing characters when spoken, the method comprising receiving input speech having a context cue phrase, the context cue phrase comprising a character string, a word phrase having the character string, and a context cue, detecting the context cue phrase in the received input speech without prompting indicative of the character string as text, and outputting the character string as text without the word phrase and the context cue for detected context cue phrases.

Claim 18 clarifies that a context cue phrase comprising a character string, a word phrase, and a context cue is detected in the input speech without user prompting indicative of the character string as text. In other words, the user or system need not affirmatively provide prompting to indicate a word is being spelled out in input speech. It is believed that claim 18 is patentably distinct from Mann because Mann does not detect context cue phrases without prompting indicative of the character string as text. Instead, Mann provides that its system "prompts" a user

or caller to spell out a word when there is a failed attempt to recognize a word or when requesting information likely to fall outside the speech recognition system's vocabulary. [Col. 7, lines 31-37] In contrast, claim 18 detects context cue phrases in received input speech without prompting of the character string as text.

Therefore, claim 18 is believed to be patentable over the cited art. Claims 19-30 depend on claim 18 and are believed to be separately patentable. Reconsideration and allowance of claims 18-30 are respectfully requested.

Claim 31 has been amended in a manner similar to claim 18 and recites a computer readable medium having instructions, which when executed by a processor, for recognizing character strings when spoken, the instructions comprising a language model indicative of context cue phrases consisting essentially of associated character strings, word phrases having the character strings and context cues, and a recognition module for receiving data indicative of input speech, detecting the presence of context cue phrases in the input speech without prompting indicative of character strings as text, accessing the language model, and outputting a character string as text for at least some of the context cue phrases spoken by the user. [emphasis added]

The remarks as to claim 18 are incorporated herein. Therefore, it is believed that claim 31 is patentable over the cited art at least because claim 31 detects the presence of context cue phrases in input speech without prompting indicative of character strings as text. Claims 32-40 depend on claim 31 and are believed to be separately patentable. Reconsideration and allowance of claims 31-40 are respectfully requested.

The Office Action next reports that claims 7-9, and 12-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mann in view of U.S. Patent No. 6,321,196 to Franceschi (hereinafter Franceschi). Franceschi is believed to be not very

relevant to claims 7-9 and 12-14 due to the amendment of claim 1 which recites "characters of an Asian language". It is believed that Franceschi is directed towards languages having an alphabet such as English. Further, Fransceschi includes user prompting indicative of a desire to phonetically spell a word. [See Col. 4, lines 46-56] Independent claims 18 and 31 include the limitation of detecting context cue phrases without prompting indicative of the character string as text.

In light of the foregoing, it is believed that claims 1, 18, and 31 are patentable over the combination of Mann and Franscheschi. Finally, the Office Action reports that claims 3-4, 23-24, 27, and 34-35 were rejected under 35 U.S.C. §103 as being unpatentable over Mann in view of Meter et al. ("Statistical language modeling combining N-gram and context-free grammars," April, 1993) (hereinafter Mateer) The above remarks are incorporated herein. Therefore, it is believed that claims 1, 18, and 31 and their respective dependent claims as patentable over the combination of Mann and Mateer. Reconsideration and allowance of all pending claims is respectfully requested.

A petition for an extension of time is hereby requested. A charge authorization for the extension of time fee is included herewith.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Steven M. Koehler, Reg. No. 36,188
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

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